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LeBoeuf, Lamb, Greene & MacRae LLP

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ORIGINAL

November 16, 2006

BY HAND

Magalie Roman Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: *Broadwater Energy LLC*, Docket No. CP06-54-000
Broadwater Pipeline LLC, Docket Nos. CP06-55-000 & CP06-56-000

Dear Ms. Salas:

Enclosed for filing in the referenced proceedings is a copy of the November 13, 2006 correspondence from Broadwater Energy LLC and Broadwater Pipeline LLC (collectively, "Broadwater") to the United States Army Corps of Engineers. This submission consists of this letter and the following two volumes:

Volume I—Public volume. Volume I contains public information. Broadwater is providing an original and seven copies of Volume I.

Volume II—Critical Energy Infrastructure Information ("CEII")volume. Information in Volume II contains CEII as defined in section 388.113(c)(1) of the Federal Energy Regulatory Commission's ("Commission") regulations, 18 C.F.R. § 388.113(c)(1). Broadwater requests confidential treatment for this material which should not be released to the public. Accordingly, Volume II and the information therein has been marked as "Contains Critical Energy Infrastructure Information - Do Not Release." Questions regarding this request for CEII treatment should be directed to Lawrence G. Acker, LeBoeuf, Lamb, Greene & MacRae, LLP, at 202-986-8000 or the letterhead address. Procedures for obtaining access to CEII may be found at 18 C.F.R. § 388.113; requests for access to CEII should be made to the Commission's CEII Coordinator. Broadwater is providing an original and two copies of Volume II.

PUBLIC

Please date-stamp and return to our messenger the additional copy of this letter enclosed for this purpose. Copies of this letter and Volume I will be served on the official service list and on Cooperating Agencies.

Please do not hesitate to contact me with any questions regarding this submission.

Respectfully submitted

Brett A. Snyder

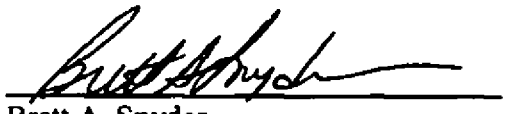
Enclosures

cc: James Martin, FERC (w/Vols. I-II)
Cooperating Agencies (w/Vol. I)
ENTRIX, Inc. (w/Vols. I-II)
Roger Stebbing and Associates (w/Vols. I-II)

CERTIFICATE OF SERVICE

I hereby certify that, I have this day caused to be served by First Class Mail or electronic mail the foregoing document upon the parties to the official service list compiled by the Secretary for this proceeding.

Dated at Washington, DC this 16th day of November, 2006.



Brett A. Snyder
LeBoeuf, Lamb, Greene & MacRae LLP
1875 Connecticut Avenue, N.W.
Washington, D.C. 20009-5728
202-986-8000

PUBLIC

ORIGINAL

PUBLIC Volume

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Broadwater Energy LLC	)	**Docket No. CP06-54-000**
	)	
Broadwater Pipeline LLC	)	**Docket No. CP06-55-000**
	)	**Docket No. CP06-56-000**

Volume I of II

November 13, 2006 Correspondence from
Broadwater Energy LLC and Broadwater Pipeline LLC
to the United States Army Corps of Engineers

November 16, 2006

ecology and environment, inc.
International Specialists in the Environment
BUFFALO CORPORATE CENTER
368 Pleasant View Drive, Lancaster, New York 14086
Tel: 716/684-8060, Fax: 716/684-0844

November 13, 2006

Mr. Michael G. Vissichelli
Chief Eastern Permits Section
New York District, Corps of Engineers
Jacob K. Javits Federal Building
New York, New York 10278

RE: Broadwater Energy
FERC Docket Nos. CP06-54-000 and CP06-55-000
USACE Application No. 2006-00265-L6
Response to November 3, 2006 Letter

Dear Mr. Vissichelli:

On behalf of Broadwater Energy LLC (Broadwater), we would like to extend our appreciation to you for your review and consideration of the Broadwater application for the above-referenced project to construct and operate a liquefied natural gas receiving terminal in Long Island Sound. In response to your November 3, 2006 letter identifying additional revisions and clarifications, Ecology and Environment, Inc. on behalf of Broadwater, has prepared this supplemental filing to address each of the items identified.

The following figures have been revised based on USACE comments 1-9 and are provided as Attachment 1:

- Proposed Onshore Facility Location, Greenport, New York;
- Proposed Onshore Facility Location, Port Jefferson, New York;
- Proposed Broadwater Project Location in Long Island Sound;
- Distances to Closest Towns to the Proposed FSRU Location;
- Broadwater Energy Alignment and Profile Drawings USACE 1 through 8;
- FSRU-General Arrangement;
- Potential Scour Protection for Yoke Mooring Tower;
- Typical Barge and Plow Pipe Ditch Trenching (2 of 2);
- Typical Towed Plow Section (3 to 4 FT. of Cover);
- Typical Foreign Utility Crossing Soil Excavation Volumes;
- FSRU Subsea Tie-in Soil Excavation Volumes;
- Iroquois Gas Transmission System Subsea Tie-in Soil Excavation Volumes; and
- Typical Towed Plow Section (5 FT. of Cover).

The USACE also requested, in Comment 10 that Broadwater provide specific contact information for the utilities corporations and ferry operators that have a vested interest due to crossings by the proposed pipeline. Two utilities and one ferry will be traversed by the pipeline. Contacts are provided below. We have also provided contact information for Iroquois Gas Transmission System as well.

Bridgeport-Port Jefferson Ferry
Frederick Hall
Vice President and General Manager
The Bridgeport-Port Jefferson Steamboat Co.
102 West Broadway
Port Jefferson, NY 11777

AT&T Cable
Louis J. Marello
Cable Engineer NJ, DE, NYC/LI
OSP Field Operations
OSPE&I District
50 Patricia Drive
Flanders, NJ 97838

Cross Sound Cable
Brian W. Reinhart
Asset Manager
Cross Sound Cable Company, LLC
110 Turnpike Road, Suite 300
Westborough, MA 01581

Iroquois Gas Transmission System
Jeffrey Bruner
Vice President, General Counsel and Secretary
Iroquois Gas Transmission System L.P.
c/o Iroquois Pipeline Operating Company
One Corporate Drive, Suite 600
Shelton, CT 06484-6211

Finally, in Comment 11, the USACE has requested specific clarification as to Broadwater's proposed construction techniques in areas were rock may be encountered (e.g., Stratford Shoal). In addition to modifying the specific drawings, as referenced in your letter, and provided in Attachment 1, Broadwater is including additional text which summarizes specific construction techniques that will be utilized in these specific areas.

Broadwater proposes that pipeline will be lowered so that the top of pipe will be installed three (3) feet or more below the natural bottom using a post-lay plowing technique. In

areas where harder material, including small cobble stones, were found during the detailed geophysical and geotechnical studies, a pre-plow test will be performed utilizing a purpose-built, reduced size model plow that will be dragged along the proposed centerline through the area. The intent of the model plow is to ascertain if a full size plow can penetrate and excavate the bottom to the needed depth. Additionally, the model plow will provide data to enable the design engineers to calculate the pull forces for the actual lowering operations and allow site specific modifications to be made to the plow design.

However, should the model plow operation determine that a post-lay plowing operation will not achieve the required lowering depth and/or the calculated pull force is in excess of a normal/safe operation, Broadwater has developed a trenching procedure using a large capacity, long arm excavator similar to the Great Lakes *New York*. The harder materials found during the investigations are mostly cobble stones that can be excavated and used as the back-fill material as required. The Contingency Plan that Broadwater developed and submitted as Appendix C to Resource Report 1 of the application submitted to the Federal Energy Regulatory Commission (FERC) is provided as Attachment 2. As such, Broadwater does not anticipate, nor has it planned for, blasting during the trenching operation.

We believe that submittal of this revised information will be sufficient for your finalization of the Public Notice (PN) for the Broadwater Project. Please do not hesitate to contact me at 716-684-8060 with any questions.

Sincerely,

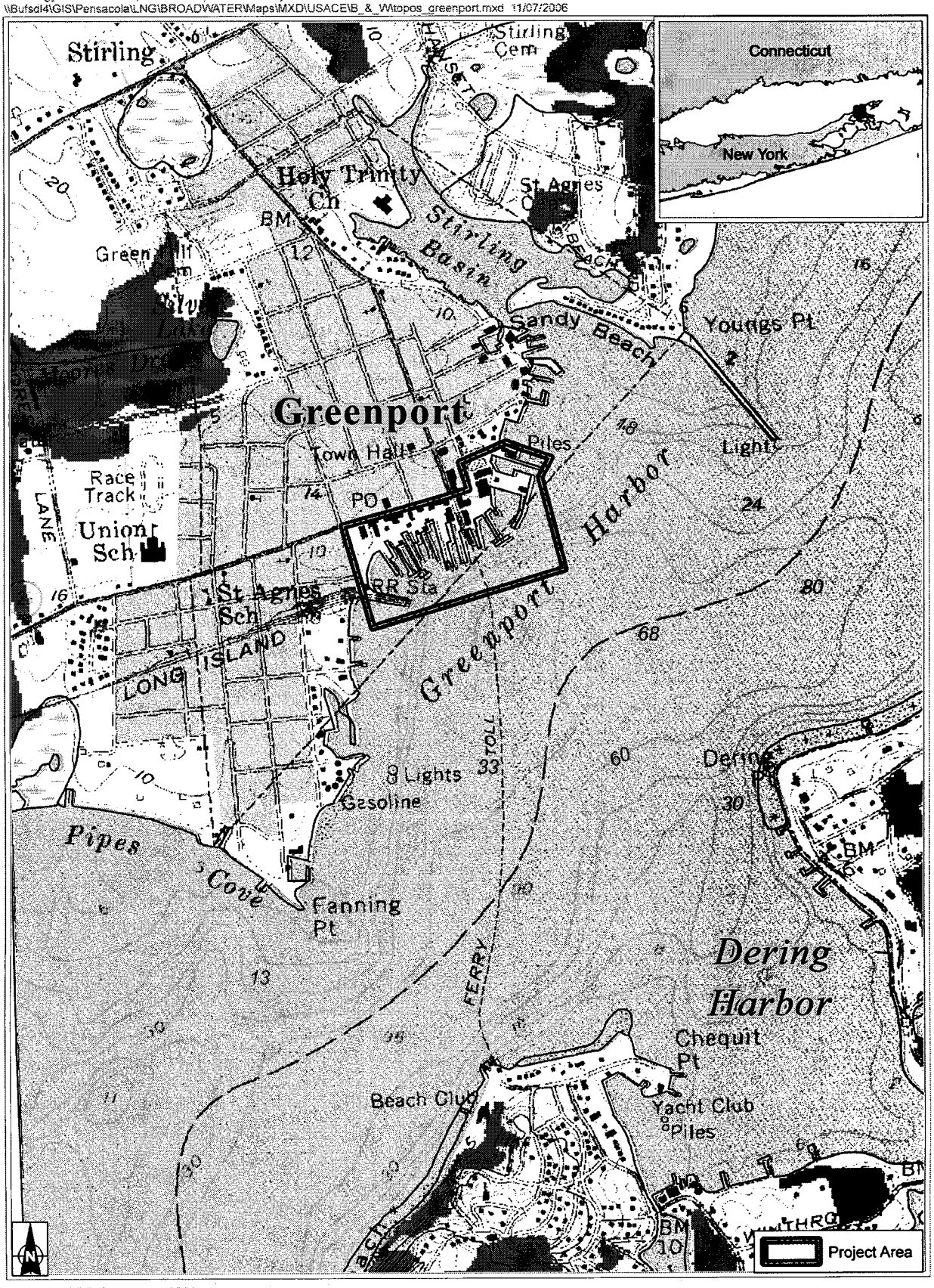
ECOLOGY AND ENVIRONMENT, INC.

M. Donnelly

Michael Donnelly,
Project Manager

Attachments

cc: Russ Smith, USACE
Murray Sondergard, Broadwater Energy
Stephen Marr, Broadwater Energy
Sandra Barnett, Broadwater Energy



Source: USGS Greenport, 1956; Southold, 1956.

0 0.1 0.2 0.4
Miles

Figure 1-1 Proposed Onshore Facility Location Greenport, New York

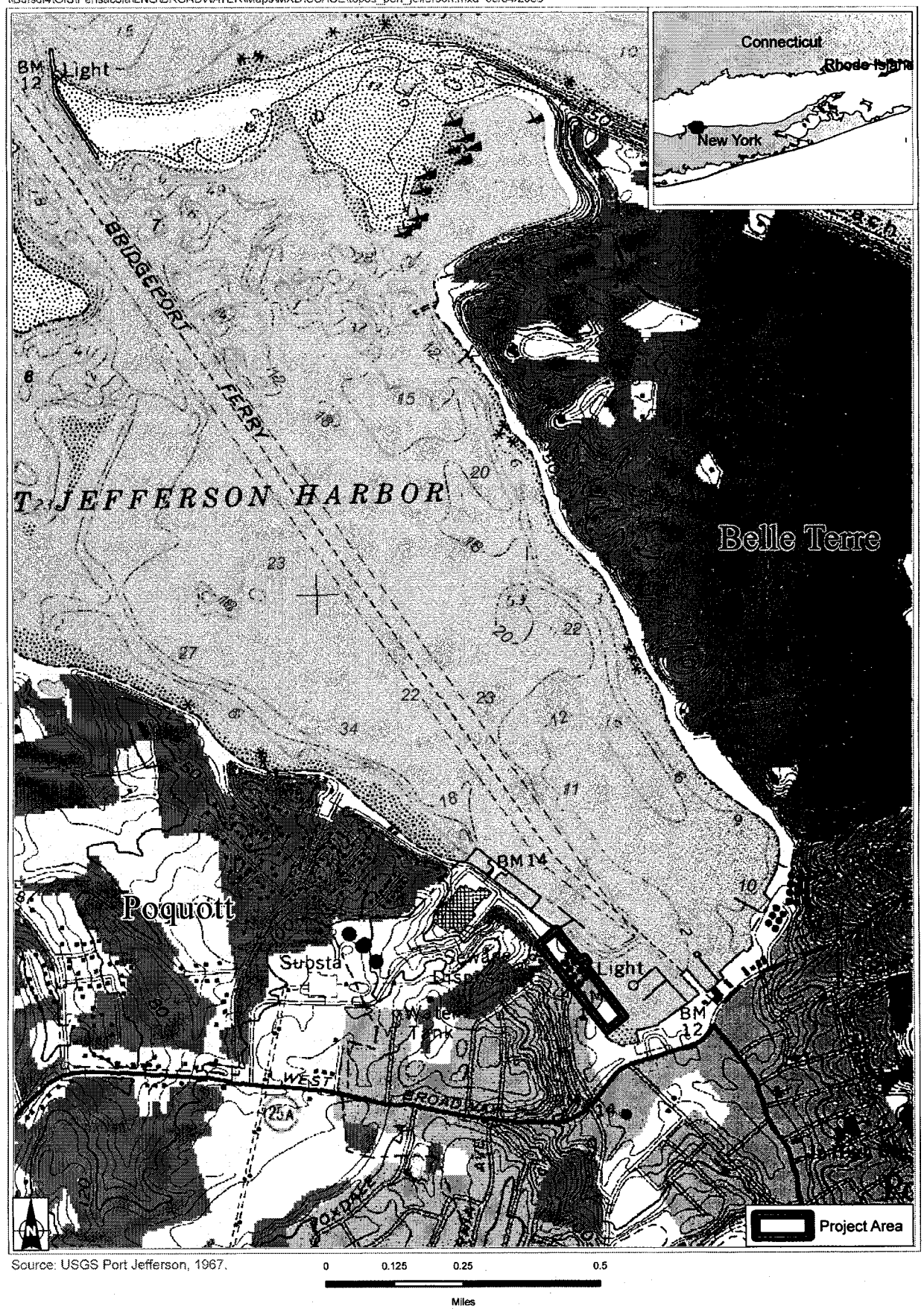
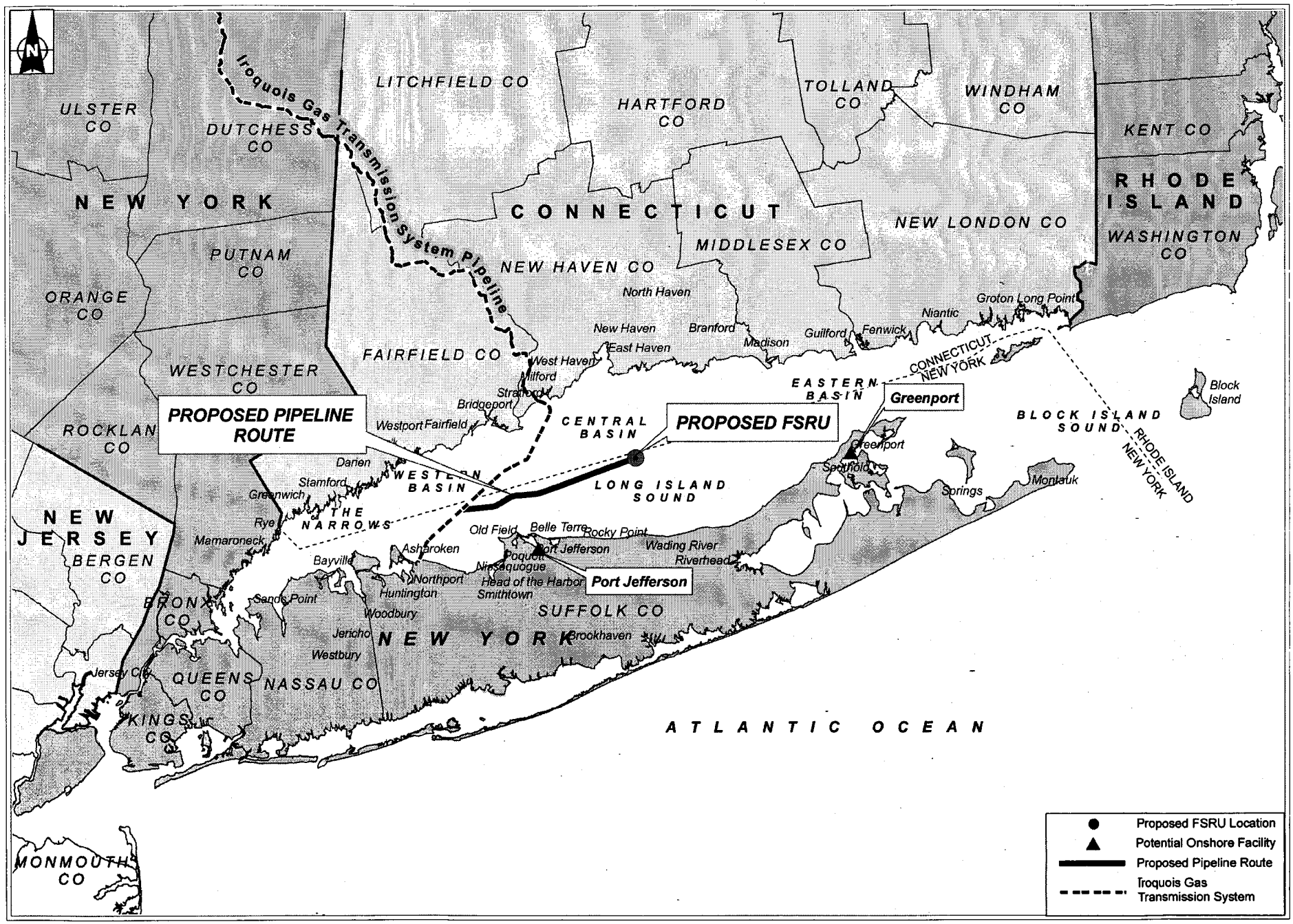


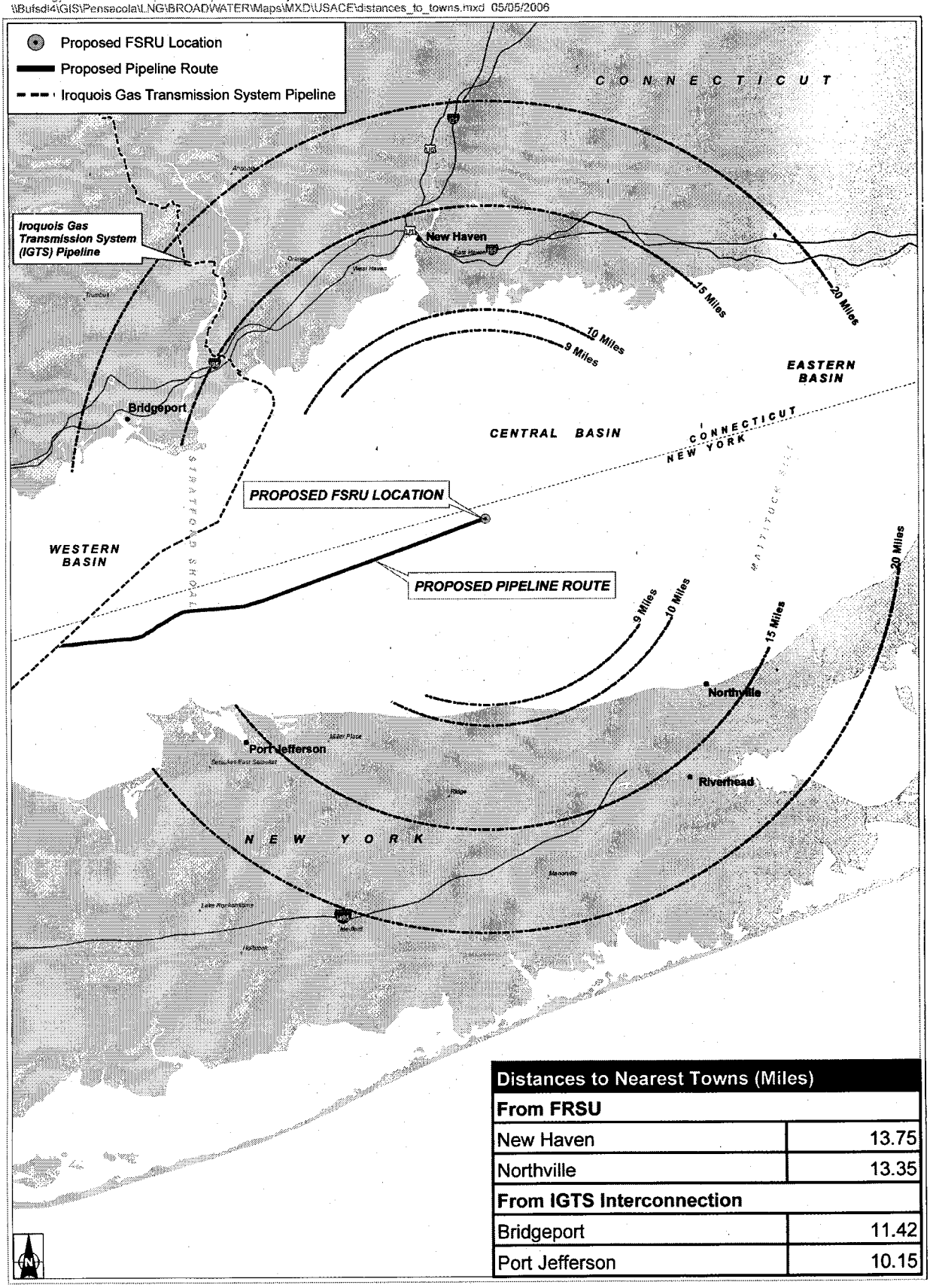
Figure 1-2 Proposed Onshore Facility Location
Port Jefferson, New York



Source: ESRI StreetMap, 2002.

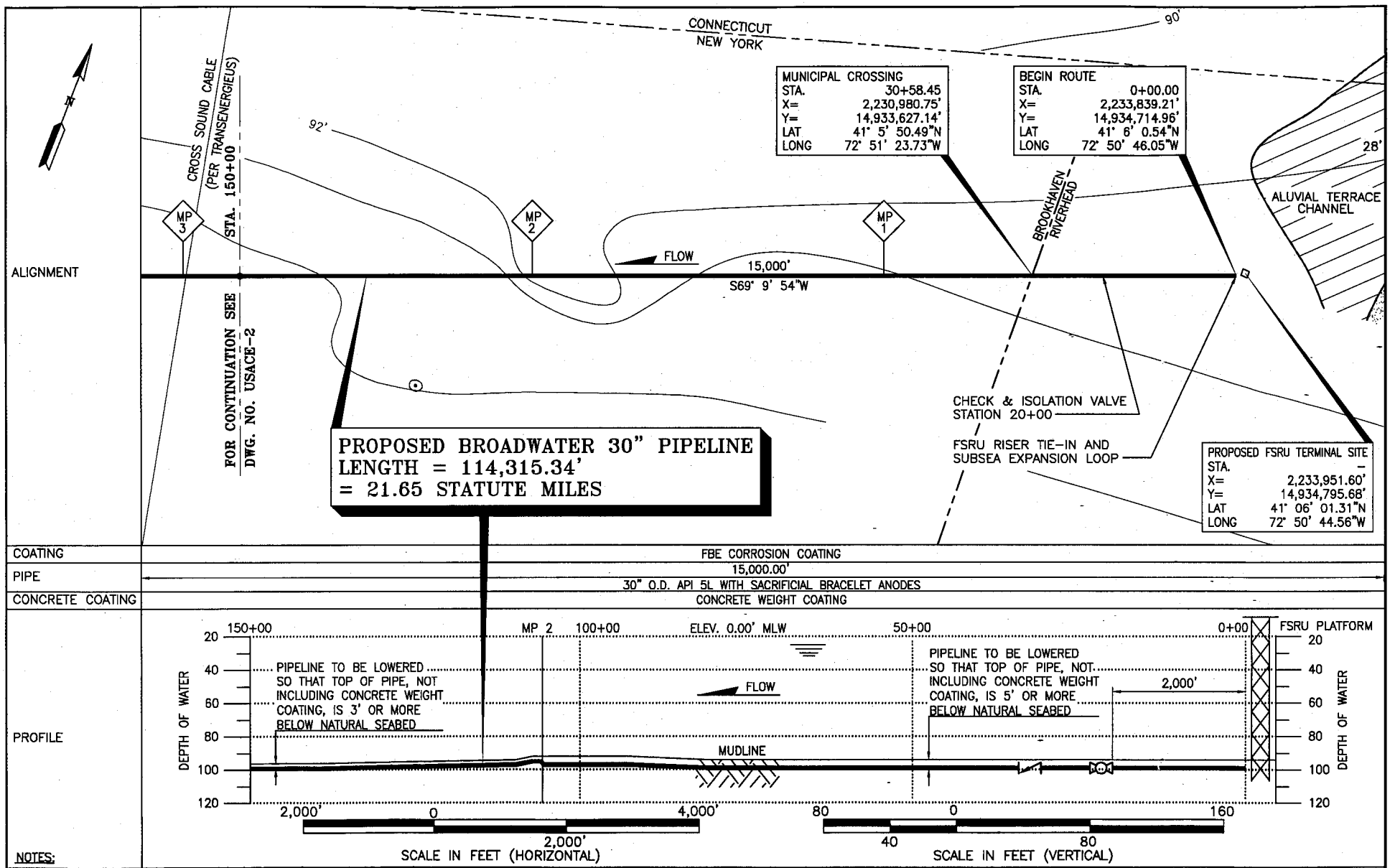
0 5 10 20 30
Miles

Figure 1-1 Proposed Broadwater Project Location in Long Island Sound



Distances to Nearest Towns (Miles)	
From FRSU	
New Haven	13.75
Northville	13.35
From IGTS Interconnection	
Bridgeport	11.42
Port Jefferson	10.15

Distances to Closest Towns to the Proposed FSRU Location



NOTES:

1. SURVEY INFORMATION PROVIDED BY TESLA OFFSHORE, INC., JUNE, 2005.
2. GEODETIC INFORMATION BASED UPON UTM ZONE 18N (GRID UNITS IN FEET), GEODETIC DATUM: NAD 83 CLARKE SPHERIOD 1866.
3. THE CROSS SOUND CABLE LOCATION IS PROVIDED BY TRANSENERGIEUS.

LEGEND

LIGHTERING AREAS

IN-ACTIVE DUMPING GROUNDS
CABLE AREAS

LARGE ROCKS

GRAVEL

MILEPOST MP 19

BROADWATER
BROADWATER ENERGY

PROJECT CONSULTING SERVICES, INC.
3300 WEST ESPLANADE AVE., S., SUITE 500
METAIRIE, LA 70002-7406
(504) 833-6321 Fax (504) 833-4940
www.projectconsulting.com

BROADWATER ENERGY
ALIGNMENT AND PROFILE
30" O.D. PIPELINE

DRAWN BY: J.E.F.	CHK'D. BY: J.H.R.
DATE: 5-15-06	APPRV. BY: J.H.R.
DWG. NO. USACE-1	REV B

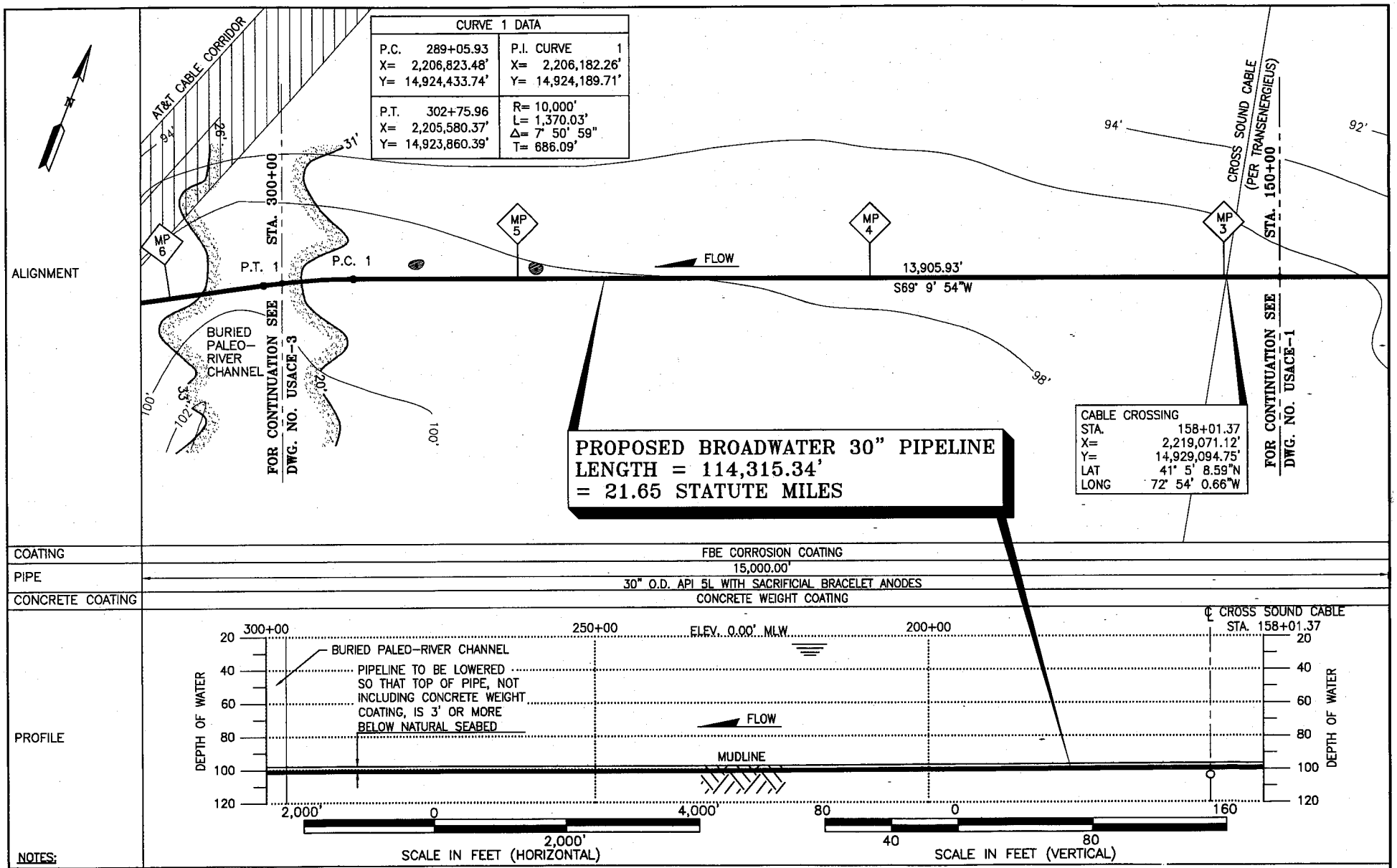
11-08-06 9:56 05117 7 K.M.A.

Public Version

Critical Energy Infrastructure Information Has Been Removed

Public Version

Critical Energy Infrastructure Information Has Been Removed



NOTES:

1. SURVEY INFORMATION PROVIDED BY TESLA OFFSHORE, INC., JUNE, 2005.
2. GEODETIC INFORMATION BASED UPON UTM ZONE 18N (GRID UNITS IN FEET), GEODETIC DATUM: NAD 83 CLARKE SPHERIOD 1866.
3. AT&T HAS PROVIDED PCS WITH AN AS-BUILT MAP WHICH HAS ONLY ONE COORDINATE POSITION. HOWEVER, PCS WAS TOLD THAT THE CABLE IS WITHIN THE CHARTED ZONE. DIVER SURVEY WILL BE USED TO LOCATE POSITION OF CABLE PRIOR TO CROSSING.
4. THE CROSS SOUND CABLE LOCATION IS PROVIDED BY TRANSENERGIEUS.

LEGEND

LIGHTERING AREAS
IN-ACTIVE DUMPING GROUNDS
CABLE AREAS
LARGE ROCKS
GRAVEL
MILEPOST MP 19

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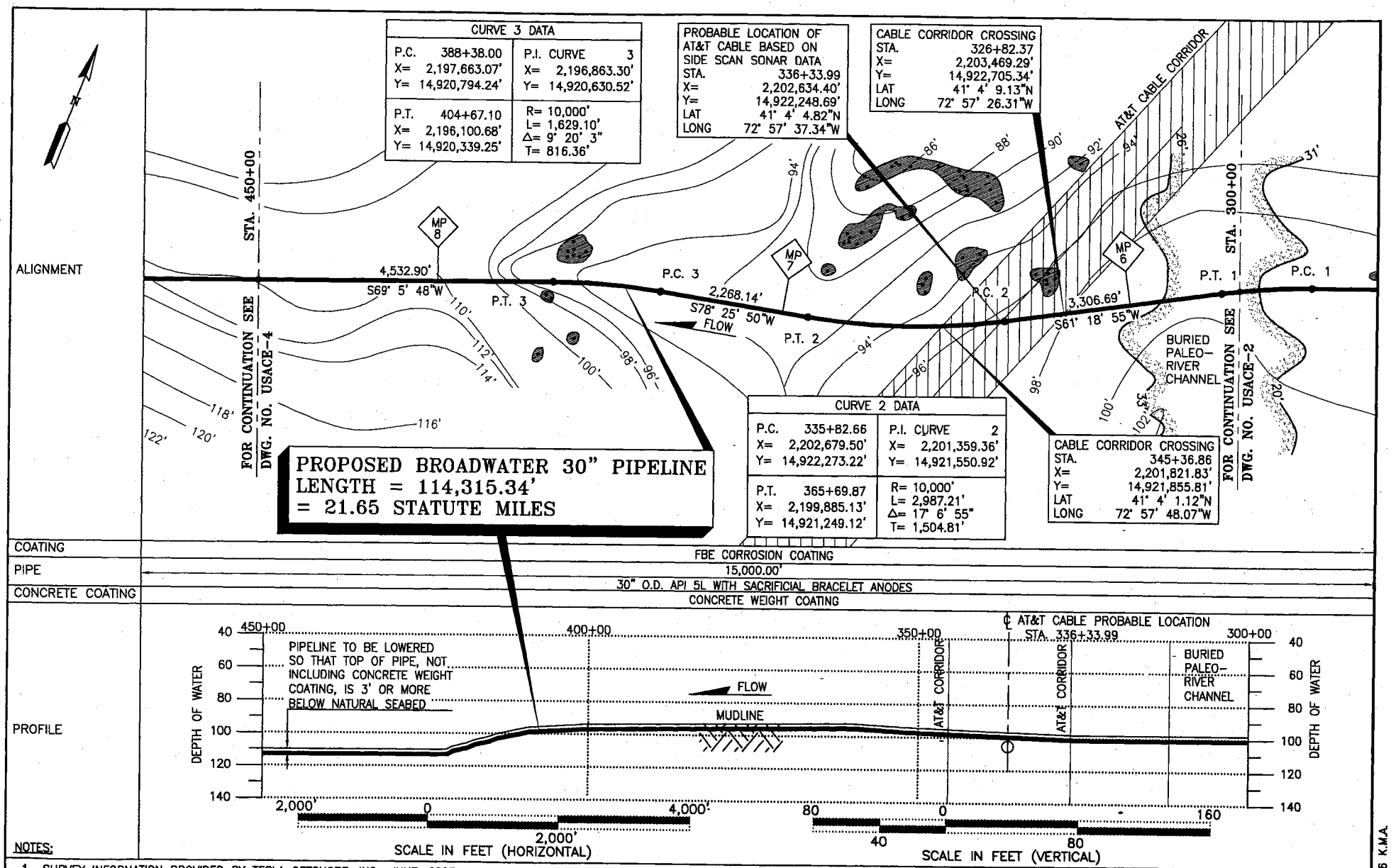
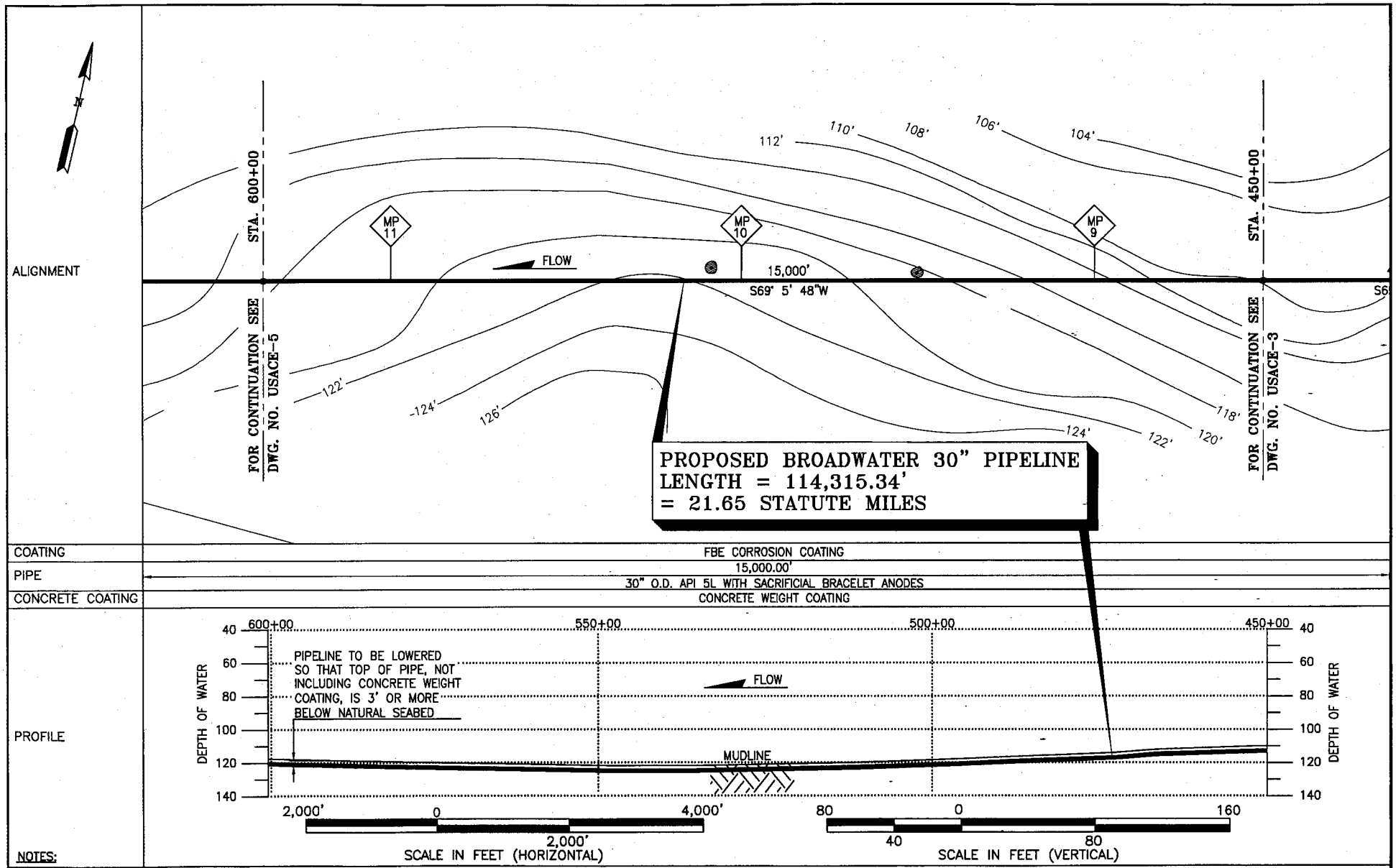
30" O.D. PIPELINE

DRAWN BY: J.E.F.	CHK'D. BY: J.H.R.
DATE: 5-15-06	APPRV. BY: J.H.R.
DWG. NO. USACE-2	REV B

11-08-06 9:57 05117 4 K.M.A.





NOTES:

1. SURVEY INFORMATION PROVIDED BY TESLA OFFSHORE, INC., JUNE, 2005.
2. GEODETIC INFORMATION BASED UPON UTM ZONE 18N (GRID UNITS IN FEET), GEODETIC DATUM: NAD 83 CLARKE SPHERIOD 1866.

LEGEND

LIGHTERING AREAS
IN-ACTIVE DUMPING GROUNDS
CABLE AREAS
LARGE ROCKS
GRAVEL
MILEPOST MP 19

BROADWATER
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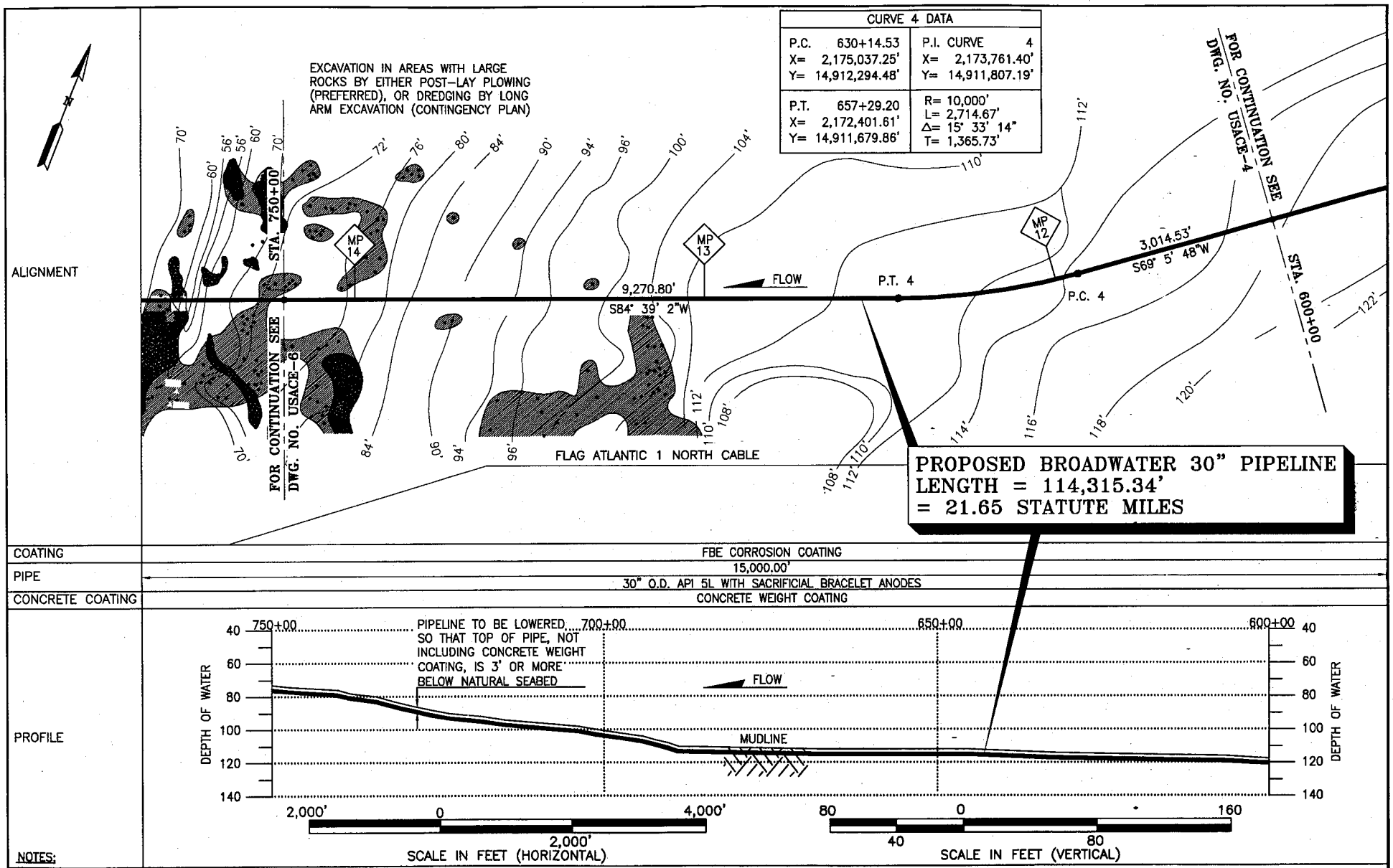
BROADWATER ENERGY
ALIGNMENT AND PROFILE
30" O.D. PIPELINE

DRAWN BY: J.E.F.	CHK'D. BY: J.H.R.
DATE: 5-15-06	APPRV. BY: J.H.R.
DWG. NO. USACE-4	REV B

11-08-06 9:58 05117 5 K.M.A.



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METAIRIE, LA 70002-7406
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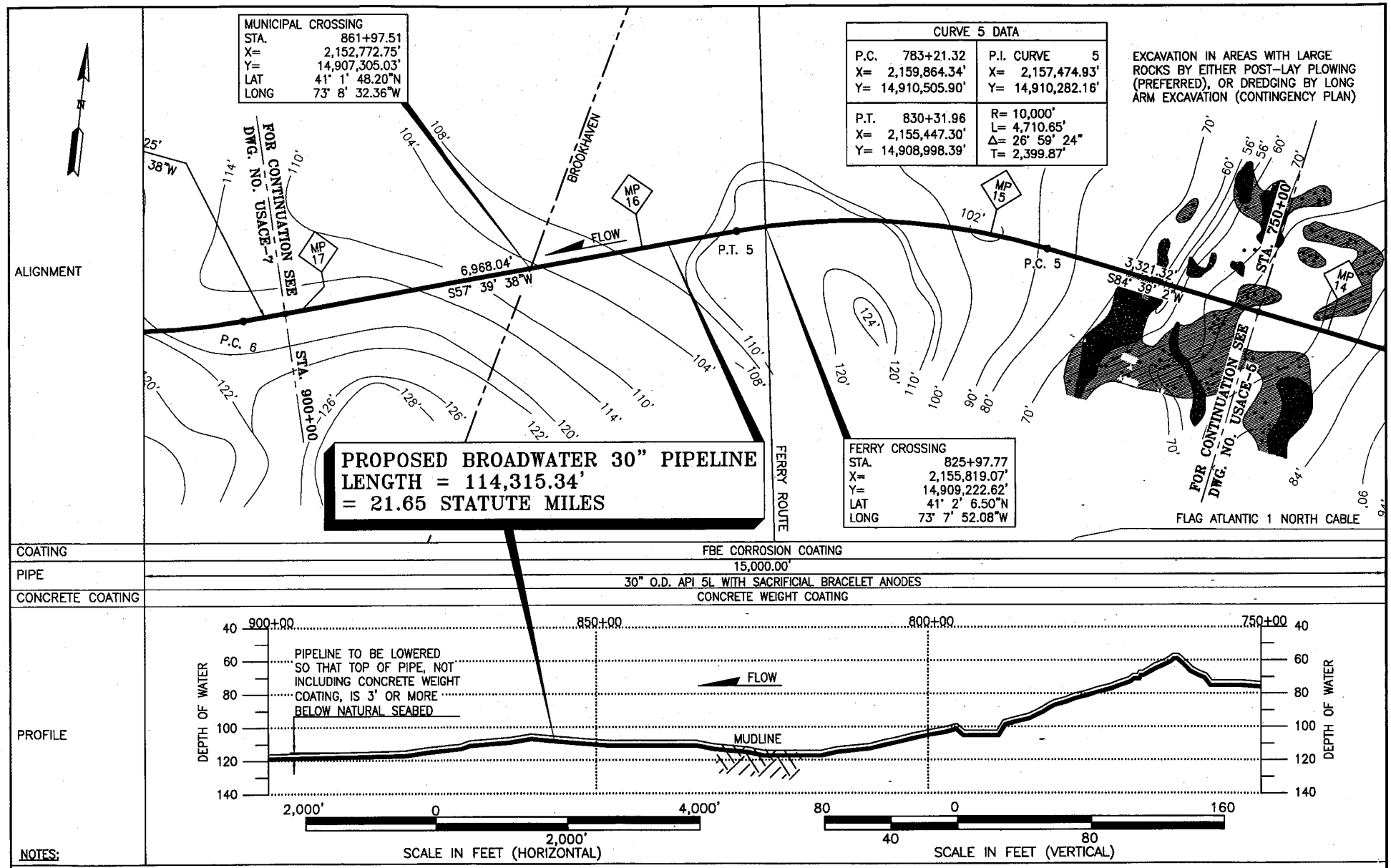
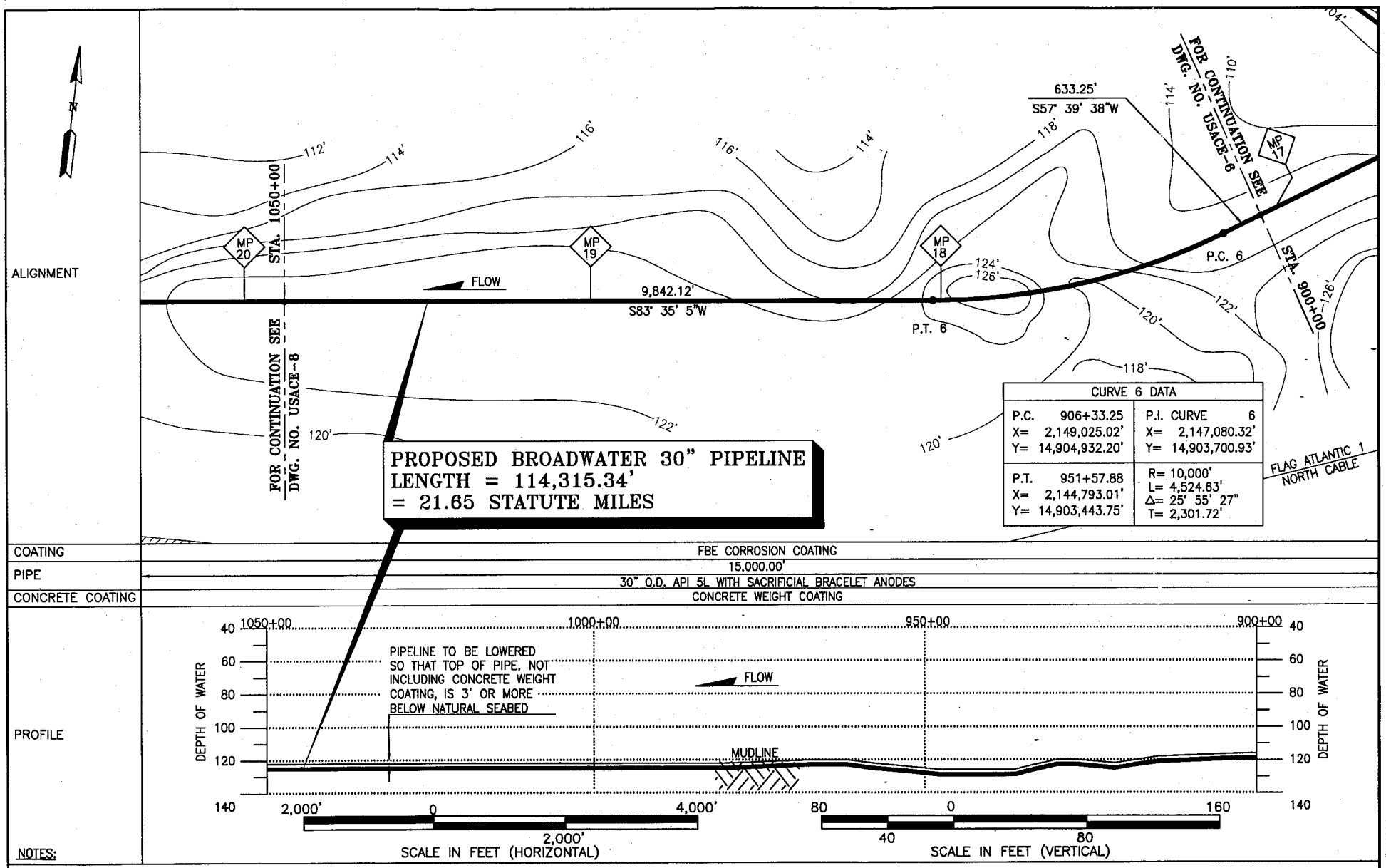
BROADWATER ENERGY
ALIGNMENT AND PROFILE
30" O.D. PIPELINE

DRAWN BY: J.E.F.	CHK'D. BY: J.H.R.
DATE: 5-15-06	APPRV. BY: J.H.R.
DWG. NO. USACE-5	REV B

11-08-06 10:03 05117 5 K.M.A.





NOTES:

1. SURVEY INFORMATION PROVIDED BY TESLA OFFSHORE, INC., JUNE, 2005.
2. GEODETIC INFORMATION BASED UPON UTM ZONE 18N (GRID UNITS IN FEET), GEODETIC DATUM: NAD 83 CLARKE SPHERIOD 1866.

LEGEND

LIGHTERING AREAS
IN-ACTIVE DUMPING GROUNDS
CABLE AREAS
LARGE ROCKS
GRAVEL
MILEPOST MP 19

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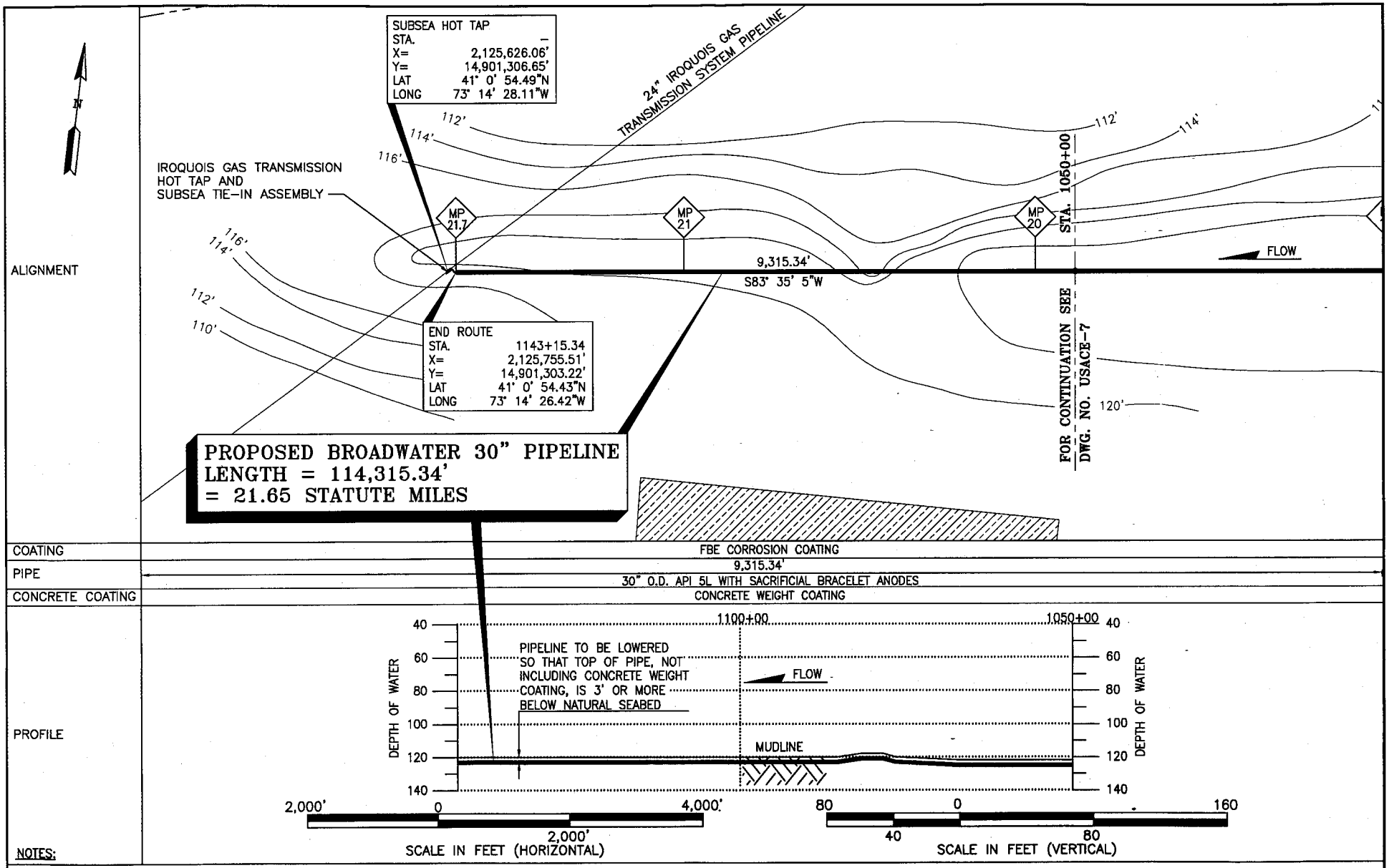
BROADWATER ENERGY
ALIGNMENT AND PROFILE
30" O.D. PIPELINE

DRAWN BY: J.E.F.	CHK'D. BY: J.H.R.
DATE: 5-15-06	APPRV. BY: J.H.R.
DWG. NO. USACE-7	REV B

11-08-06 10:05 05117 5 K.M.A.



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(504) 833-5221 Fax (504) 833-4940
www.projectconsulting.com

BROADWATER ENERGY
ALIGNMENT AND PROFILE
30" O.D. PIPELINE

DRAWN BY: J.E.F.	CHK'D. BY: J.H.R.
DATE: 5-15-06	APPRV. BY: J.H.R.
DWG. NO. USACE-8	REV B

11-08-06 10:05 05117 6 K.M.A.

Public Version

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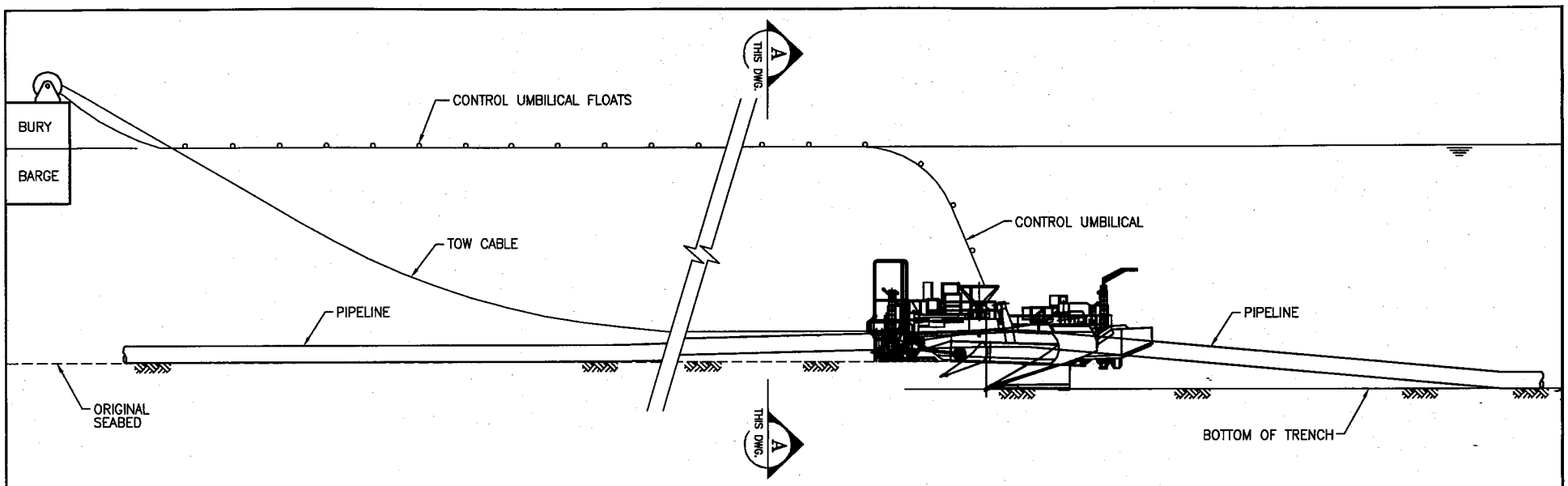

PROFILE

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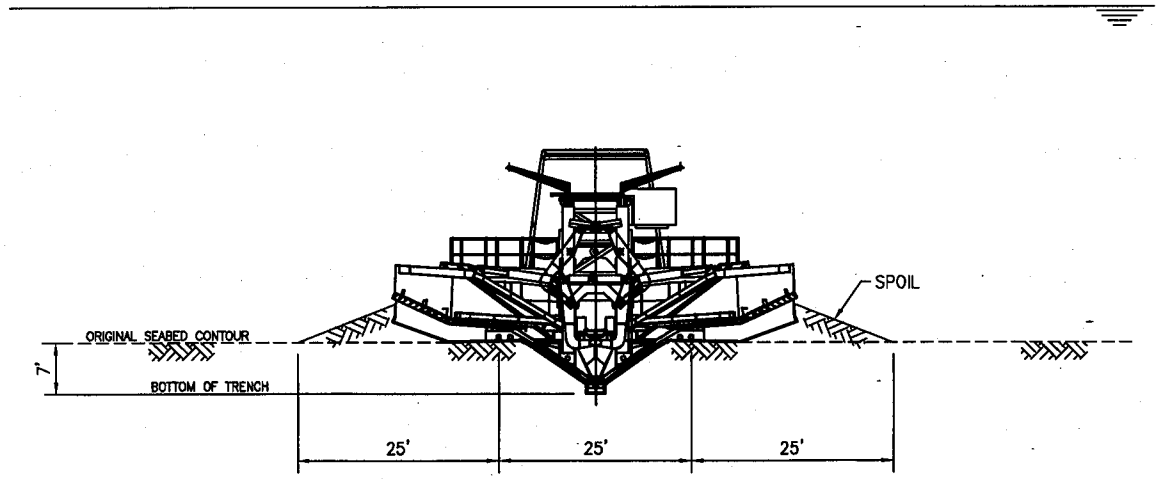


SECTION

SCALE: N.T.S.

A THIS DWG.

ISSUED FOR CONSTRUCTION
PLANNING PURPOSES

BROADWATER

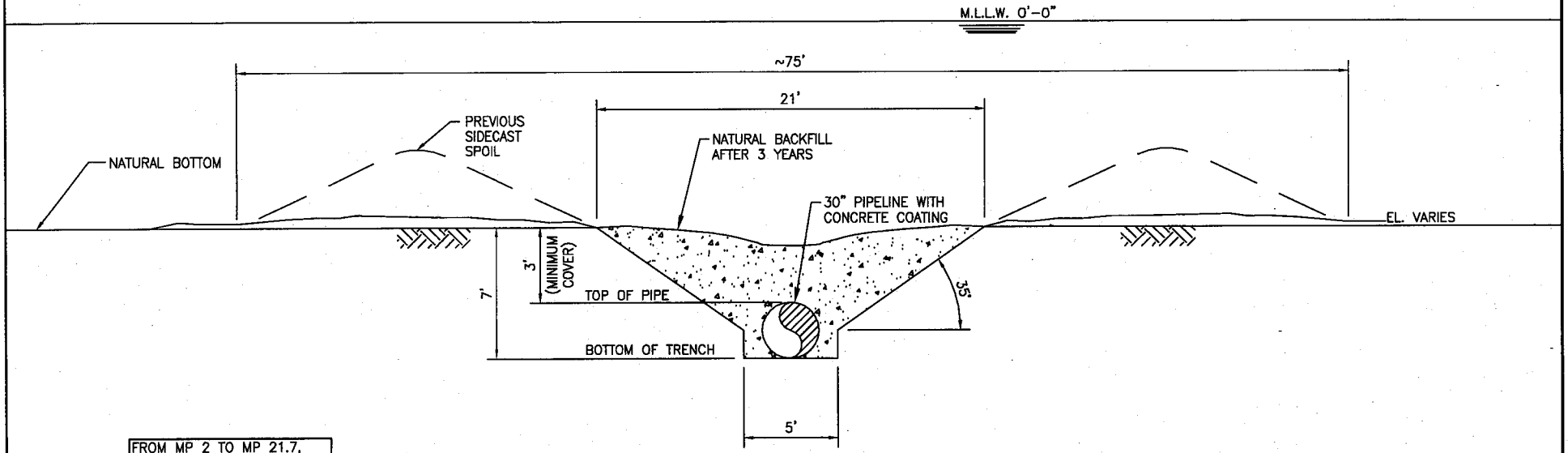
BROADWATER ENERGY

PROJECT CONSULTING SERVICES, INC.
3500 WEST ESPLANADE AVE., S., SUITE 500
METAIRIE, LA 70002-7408
(504) 833-8321 Fax (504) 833-4940
www.projectconsulting.com

TYPICAL
BARGE AND PLOW
PIPE DITCH TRENCHING (2 OF 2)

DRAWN BY: J.E.F.	CHK'D. BY: J.H.R.
DATE: 4-13-05	APPRV. BY: T.O.
DWG. NO. 05032-019	REV D

11-08-06 14:16 05032 11 K.M.A.



FROM MP 2 TO MP 21.7, EXCLUDING CABLE CROSSINGS

TYPICAL SUBSEA PIPE DITCH BY TOWED PLOW METHOD (3 TO 4 FT. OF COVER)

SCALE: N.T.S.

NOTES:

1. TRENCH CROSS SECTIONAL AREA IS APPROXIMATELY 79 SQUARE FEET.
2. TRENCH VOLUME FOR 19.7 MILES IS APPROXIMATELY 304,500 CUBIC YARDS.
3. ANTICIPATED NATURAL BACKFILLING AFTER 3 YEARS FROM INSTALLATION BASED ON NOVEMBER 2005 REPORT PREPARED BY HDR/LMS FOR BROADWATER.

ISSUED FOR CONSTRUCTION PLANNING PURPOSES

BROADWATER
BROADWATER ENERGY

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(504) 833-6321 Fax (504) 833-4940
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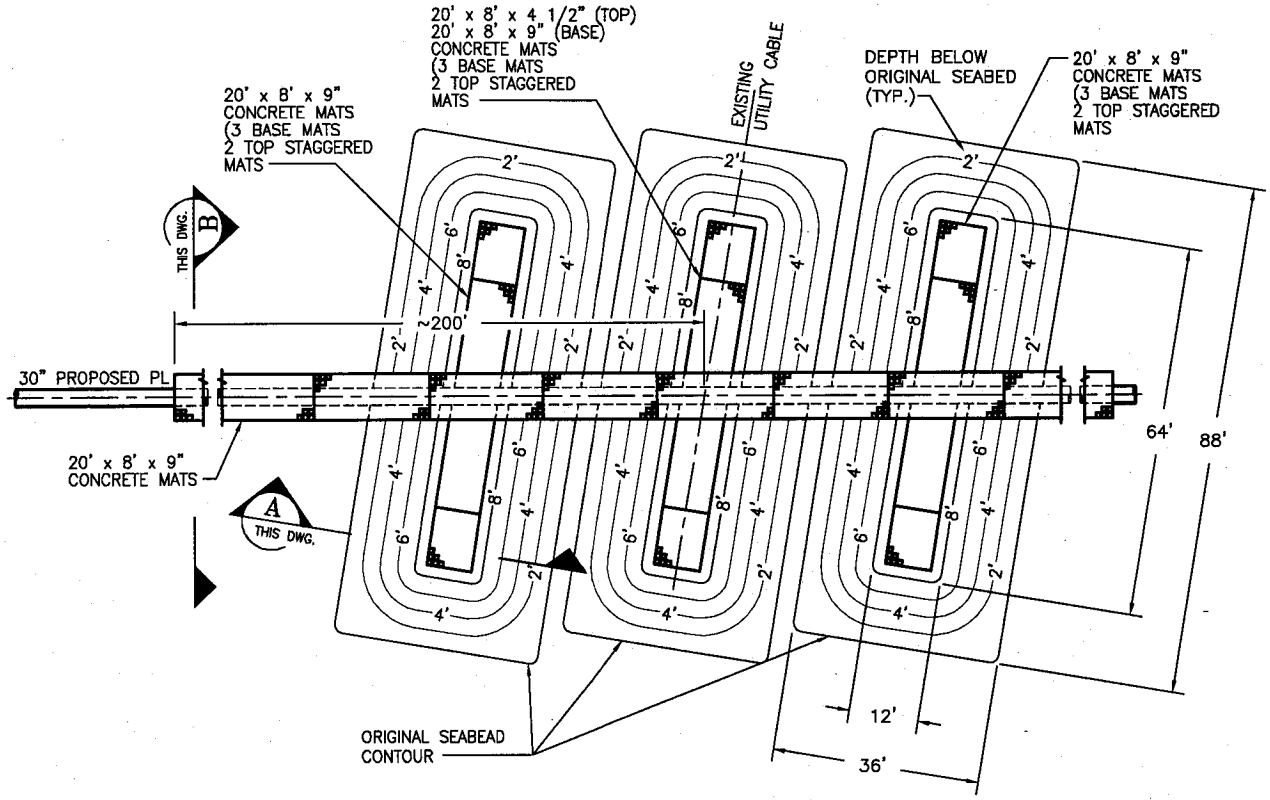
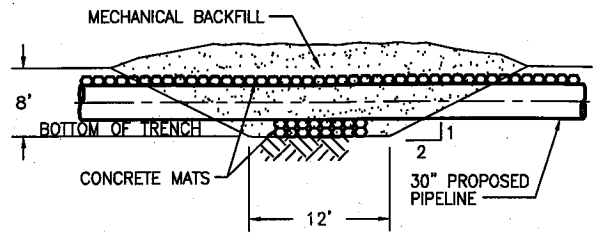
TYPICAL
TOWED PLOW SECTION
(3 TO 4 FT. OF COVER)

DRAWN BY: S.E.M.	CHK'D. BY: J.H.R.
DATE: 6-28-05	APPRV. BY: T.O.
DWG. NO. 05032-051	REV E

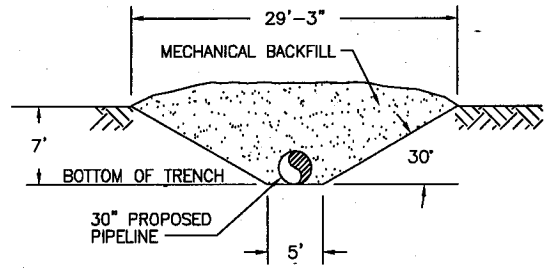
11-07-06 14:04 05032 9 K.M.A.



OCCURS AT THE AT&T AND CROSS SOUND CABLE CROSSINGS



SECTION A
SCALE: N.T.S.
THIS DWG.



SECTION B
SCALE: N.T.S.
THIS DWG.

FOREIGN UTILITY CROSSING SOIL EXCAVATION VOLUMES

SCALE: N.T.S.

NOTES:

1. PIT VOLUME = 11,232 CU. FT. = 416.00 CU. YARDS
2. 2 CROSSINGS WITH 3 PITS PER CROSSING AT&T AND CROSS SOUND
   2 x 3 x 416 YD^3 ≈ 2,500 YD^3 FOR CABLE CROSSINGS
3. TRENCH CROSS SECTIONAL AREA IS APPROXIMATELY 120 SQUARE FEET.
4. TRENCH VOLUME FOR CROSSING TRANSITION IS APPROXIMATELY 2 x 200' x 120 FT^2 = 48,000 FT^3 = 1,778 YD^3/CROSSING.
   THERE ARE 2 CROSSINGS THAT PROVIDE A TOTAL TRENCH VOLUME OF APPROXIMATELY 3,556 YD^3.
5. SURFACE AREA OF TOP LAYER IS APPROXIMATELY 0.829 ACRES (FOR BOTH CROSSINGS).

ISSUED FOR CONSTRUCTION
PLANNING PURPOSES

BROADWATER
BROADWATER ENERGY

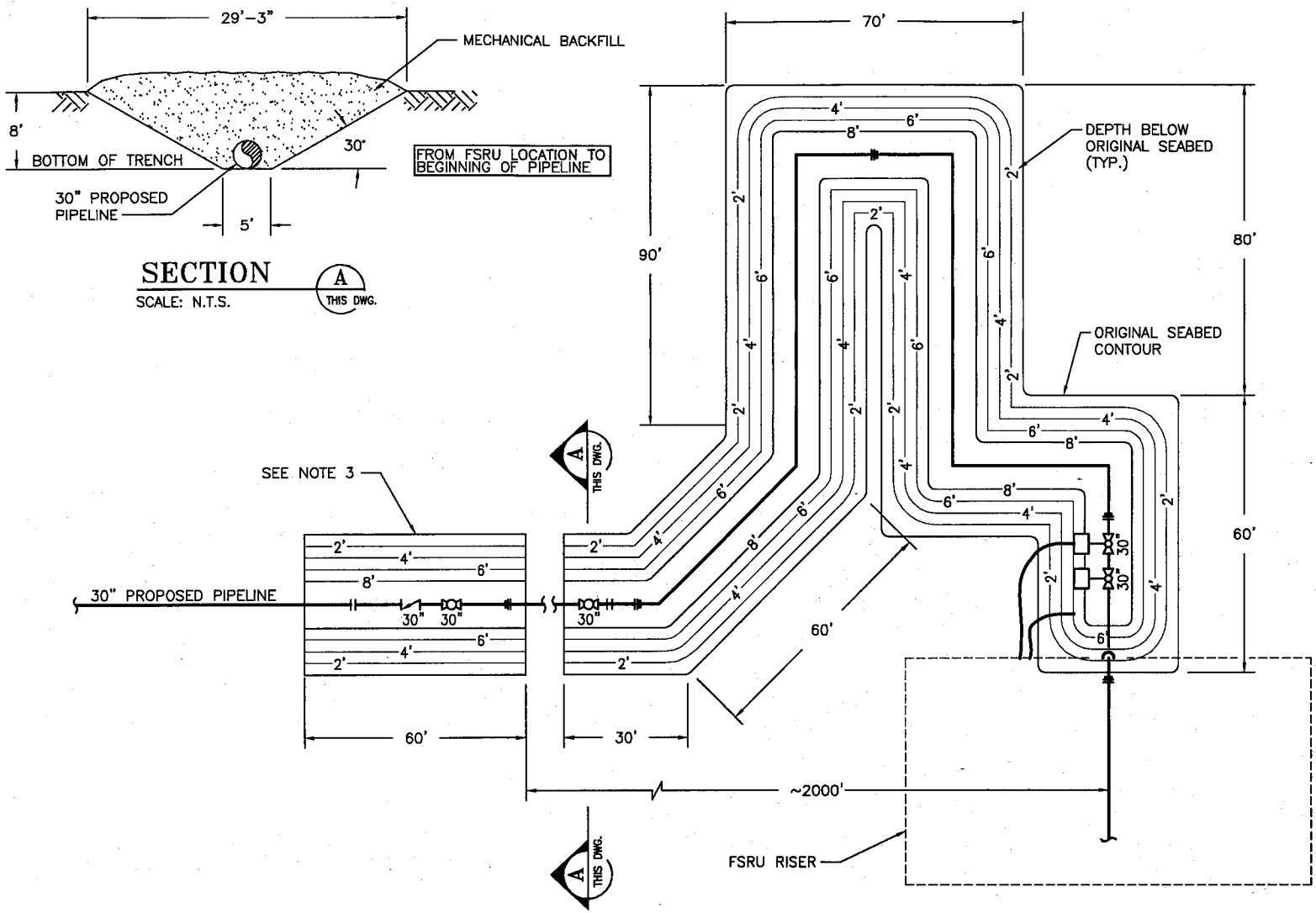
PROJECT CONSULTING SERVICES, INC.
3300 WEST ESPLANADE AVE., S., SUITE 500
METAIRIE, LA 70002-7406
(504) 833-6381 Fax (504) 833-4840
www.projectconsulting.com

TYPICAL FOREIGN UTILITY CROSSING
SOIL EXCAVATION VOLUMES

DRAWN BY: S.E.M.	CHK'D. BY: J.H.R.
DATE: 7-6-05	APPRV. BY: T.O.
DWG. NO. 05032-054	REV F

11-08-06 14:14 05032 15 K.M.A.

BV009168



FSRU SUBSEA TIE-IN SOIL EXCAVATION VOLUMES

SCALE: N.T.S.

NOTES:

1. TRENCH CROSS SECTIONAL AREA IS APPROXIMATELY 123 SQUARE FEET.
2. TRENCH VOLUME IS APPROXIMATELY 44,550 CUBIC FEET ≈ 1,650 CU YARDS.
3. TRENCH VOLUME FOR CHECK AND ISOLATION VALVE SPOOL IS APPROXIMATELY 7,200 CUBIC FEET ≈ 270 CU YARDS.
4. SURFACE AREA OF TOP LAYER IS APPROXIMATELY 0.2426 ACRES FOR THE EXPANSION SPOOL AND 0.0403 ACRES FOR THE CHECK AND ISOLATION VALVE.

ISSUED FOR CONSTRUCTION PLANNING PURPOSES

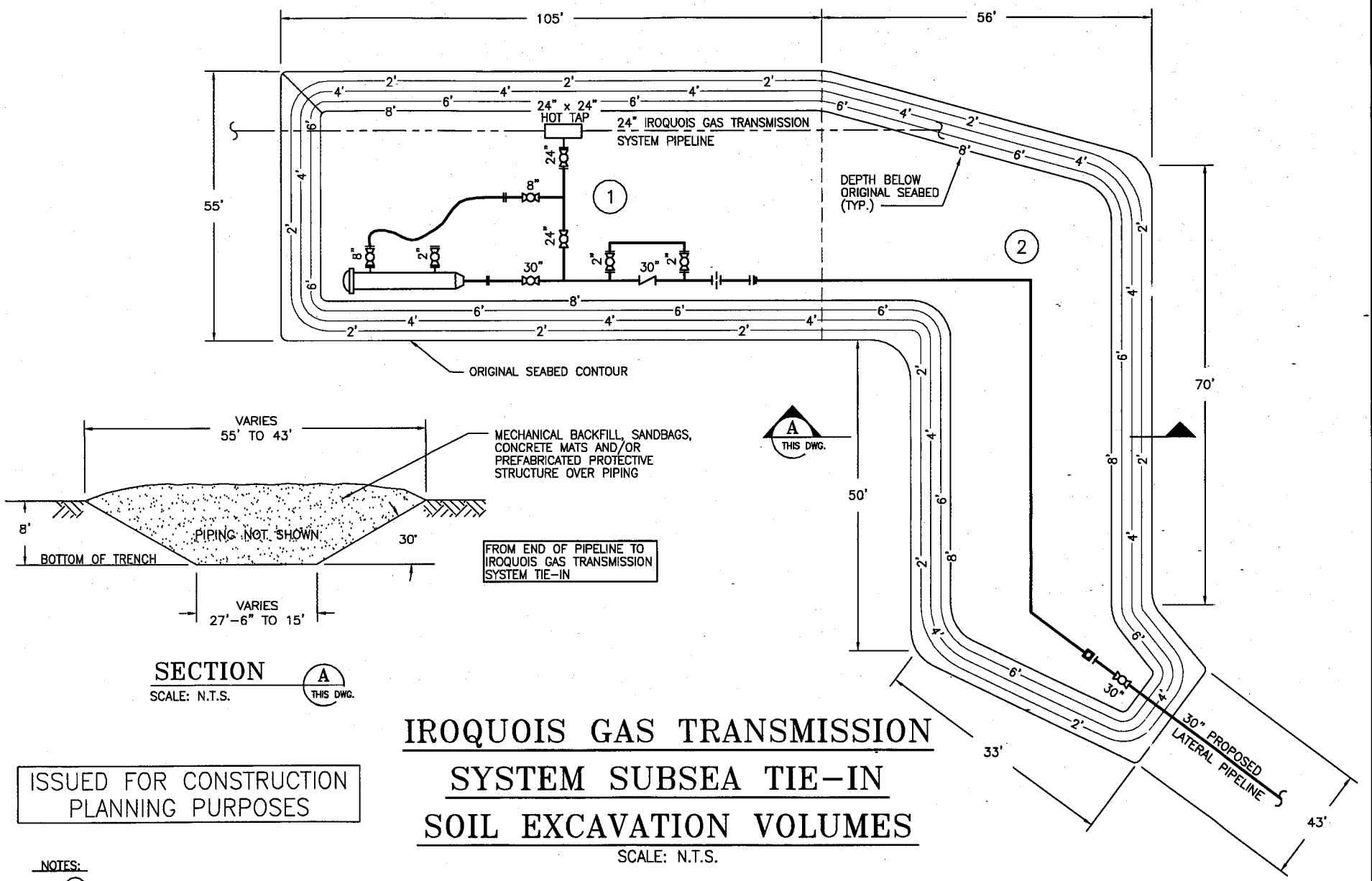
BROADWATER
BROADWATER ENERGY

PROJECT CONSULTING SERVICES, INC.
3300 WEST ESPLANADE AVE., S., SUITE 500
METAIRIE, LA 70002-7406
(504) 833-6331 Fax (504) 833-4940
www.projectconsulting.com

FSRU SUBSEA TIE-IN SOIL EXCAVATION VOLUMES

DRAWN BY: S.E.M.	CHK'D. BY: J.H.R.
DATE: 7-5-05	APPRV. BY: T.O.
DWG. NO. 05032-055	REV F

11-08-06 10:21 05117 16 K.M.A.



SECTION A

SCALE: N.T.S.

IROQUOIS GAS TRANSMISSION SYSTEM SUBSEA TIE-IN SOIL EXCAVATION VOLUMES

SCALE: N.T.S.

ISSUED FOR CONSTRUCTION PLANNING PURPOSES

NOTES:

1. PIT (1) VOLUME IS APPROXIMATELY 31,887 CUBIC FEET ≈ 1,200 CUBIC YARDS.
2. PIT (2) VOLUME IS APPROXIMATELY 30,800 CUBIC FEET ≈ 1,140 CUBIC YARDS.
3. SURFACE AREA OF TOP LAYER IS APPROXIMATELY 0.2581 ACRES.

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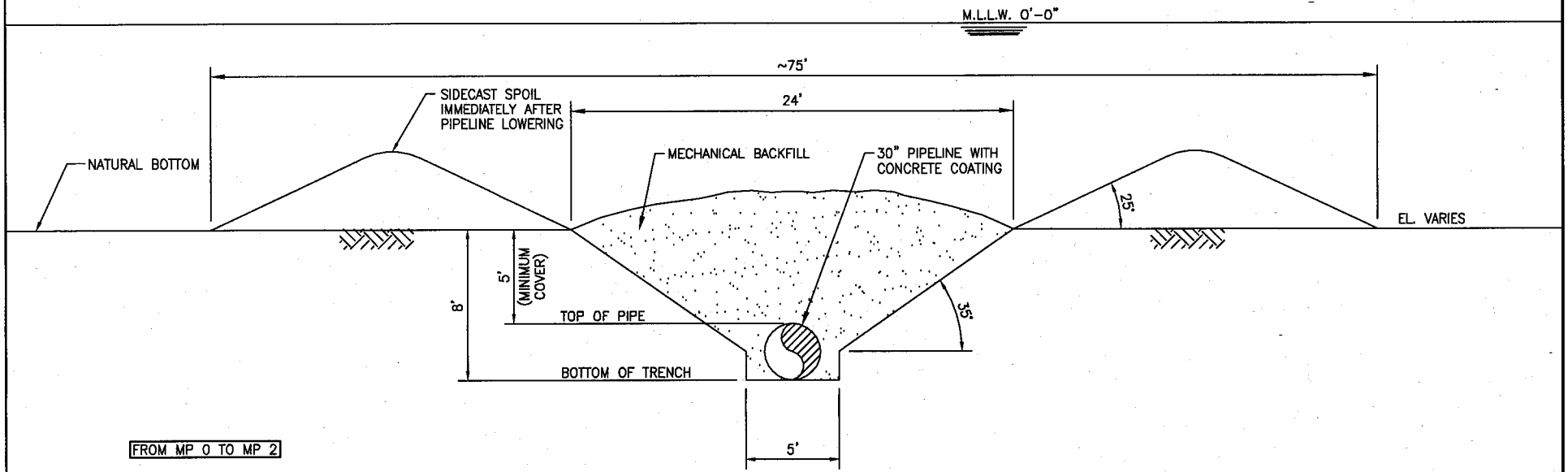
www.projectconsulting.com

IGTS HOT TAP, PIG RECEIVER & SUBSEA TIE-IN SOIL EXCAVATION VOLUMES

DRAWN BY: S.E.M.	CHK'D. BY: J.H.R.
DATE: 7-6-05	APPRV. BY: T.O.
DWG. NO. 05032-056	REV F

11-08-06 10:26 05032 12 K.M.A.



TYPICAL SUBSEA PIPE DITCH

BY TOWED PLOW METHOD

(5 FT. OF COVER)

SCALE: N.T.S.

NOTES:

1. TRENCH CROSS SECTIONAL AREA IS APPROXIMATELY 101 SQUARE FEET.
2. TRENCH VOLUME FOR 2 MILES IS APPROXIMATELY 39,500 CUBIC YARDS.

ISSUED FOR CONSTRUCTION PLANNING PURPOSES

BROADWATER

BROADWATER ENERGY

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TYPICAL TOWED PLOW SECTION (5 FT. OF COVER)

DRAWN BY: G.J.D.	CHK'D. BY: J.H.R.
DATE: 8-12-05	APPRV. BY: T.O.
DWG. NO. 05032-060	REV C

11-07-06 14:01 05032 8 K.M.A.

APPENDIX C

STRATFORD SHOAL CONTINGENCY PLAN

C3.1 Introduction

The preferred method of lowering the connecting pipeline is one or more passes of a post-lay plow. The plow will excavate a trench below the previously lowered pipeline, and the pipeline will be lowered into the furrow as the plow is pulled ahead by the laybarge or vessel.

Broadwater completed a geophysical survey and geotechnical sampling and testing program to characterize the sediments along the proposed pipeline route within the pipeline trench depth. The results are presented in Resource Report No. 7 (Soils). In general, it was observed that the soils are mostly fine-grained silts, clays, and sands for over 95% of the route, with coarser material (gravel and cobbles) occurring at Stratford Shoal (*see* Figure C3-1).

The geophysical survey conducted across Stratford Shoal confirmed the presence of hard material; however, the instrumentation was unable to identify whether the material was solid rock, cobbles, pebbles, or boulders. The geotechnical sampling conducted across the area (*see* Figure C3-2) used a vibrating core barrel or probe to penetrate below the seabed to a depth suitable to allow the lowering of the pipeline. Still photographs identified the seabed as being comprised of 3- to 4-inch cobbles, and the probe successfully penetrated deeper than 4 feet at all locations at which the likely absence of harder materials not suitable for plowing was indicated. However, the results are not considered conclusive, and further investigations will be needed during the detailed pipeline design phase.

C3.2 Test Plow Investigation

During the detailed pipeline design phase, further investigations will be required to confirm that the materials discovered during the 2005 marine survey are consistent across Stratford Shoal. Completion of this program will be required before Broadwater can accept post-lay plowing as the definite pipeline installation and lowering method across Stratford Shoal.

The test plow investigation will involve using a scaled-down plow to physically evaluate the soils that are between the 2005 vibracore sites. The test plow investigation will likely be completed at some point during the October 2008 through April 2009 period.

The test plow investigation will be conducted by independent, experienced pipeline lowering engineers who will develop and design the test program, provide supervision during the test plow investigation, and evaluate the results. Subject to availability, an existing cable-lowering plow may be utilized. The alternative is to design and fabricate a test plow.

If post-lay plowing across Stratford Shoal is rejected as a result of this investigation, then detailed planning for pre-lay trenching will be initiated, including discussions with suitable dredging contractors.

C3.2 Pre-Lay Trenching

The water depth across Stratford Shoal provides a challenge for pre-lay trenching. The most controlled method of trenching would be to use a long-arm excavator unit. This is a specialized spud barge containing a heavy duty excavator. Another option is to use a clamshell dredge; however, its effectiveness and accuracy in deep water is reduced.

Based on current geotechnical survey results, the potential pre-lay trenching length may be as long as 4,000 feet. Water depths through this section are less than 80 feet, which would permit the use of a spud-moored backhoe dredge of the type represented in Figure C3-3. The expected rate of production would be between 3,000 and 5,000 cubic yards per day, assuming a 40-foot box cut (*see* Figure C3-4). The side slopes with this material should slump to leave a 2:1 side slope and an approximate bottom width of 26 feet on which to install the pipeline. The trench volume would be approximately 40,000 cubic yards, compared to 11,700 cubic yards for the post-lay plow method. It is expected that the trench spoil would be recovered to a hopper barge and then dumped at an existing dumping site in Long Island Sound. The test plow results will be evaluated to determine whether the pre-lay trenching length and associated excavation volume can be reduced.

Pre-lay trenching operations would be initiated early in the pipeline construction schedule in October 2009. Trenching activities would span approximately 20 days, including an assumed 33% weather downtime factor; this does not include mobilization and demobilization. The equipment spread would comprise a backhoe dredge (with dive support), support tugs, survey launch, and two hopper barges with dump chutes.

C3.3 Pipe Lay

The entire 21.7-mile-long connecting pipeline will be installed utilizing a purpose-built pipeline laybarge or vessel using an installation method known as S-Lay. An average lay rate of 100 joints per 24-hour day, working around the clock in shifts, is anticipated, with a 25% weather and/or mechanical downtime factor.

The pipeline will be laid as one continuous operation, including the sections to be lowered by post-lay plow across Stratford Shoal. The pre-trench width of 26 feet through Stratford Shoal is sufficient room to ensure that installation of the pipeline in the bottom of the pre-excavated trench is achieved.

Figure C3-1 Middle Ground Plan and Profile

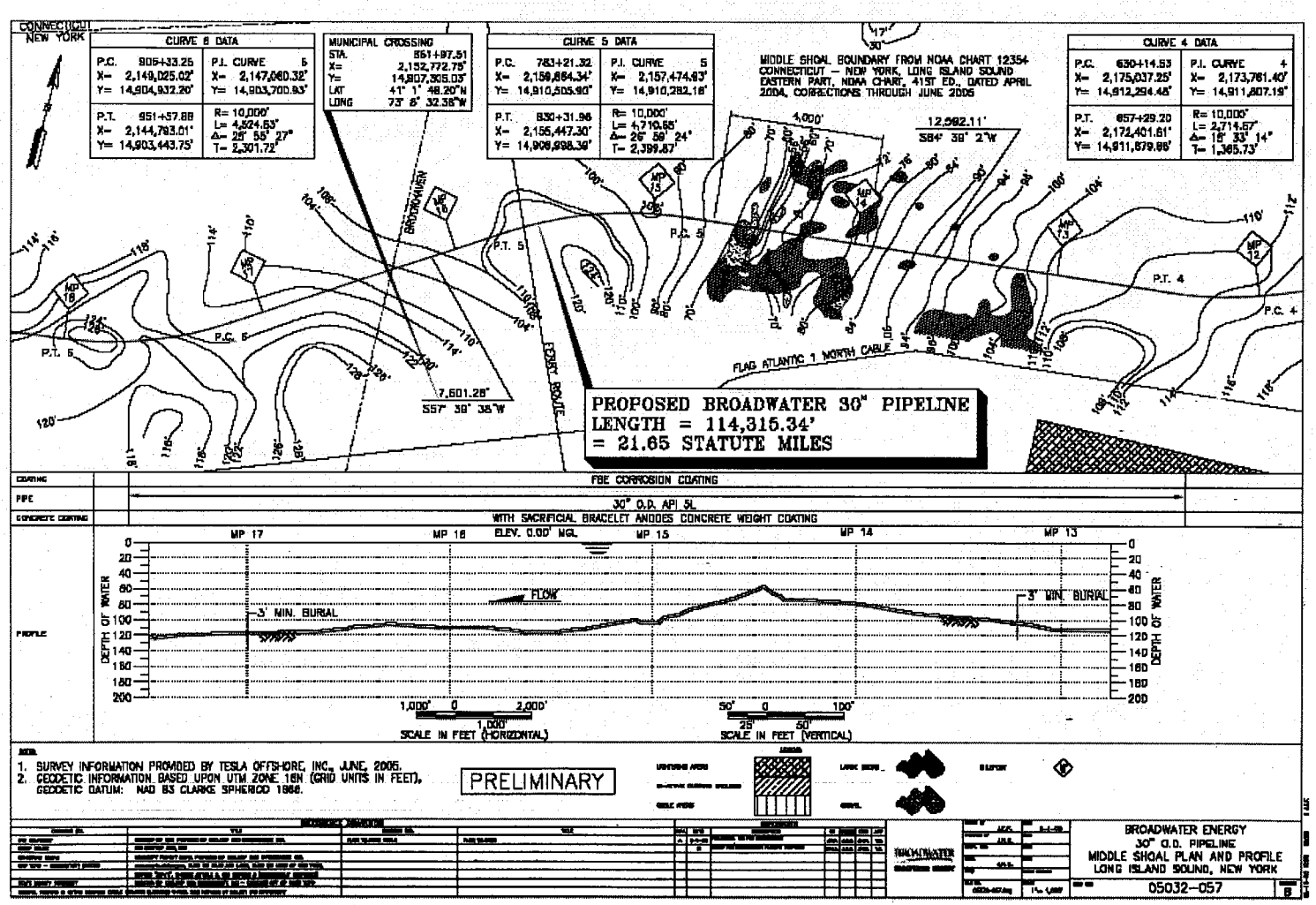


Figure C3-2 Middle Ground Potential Dredge Area

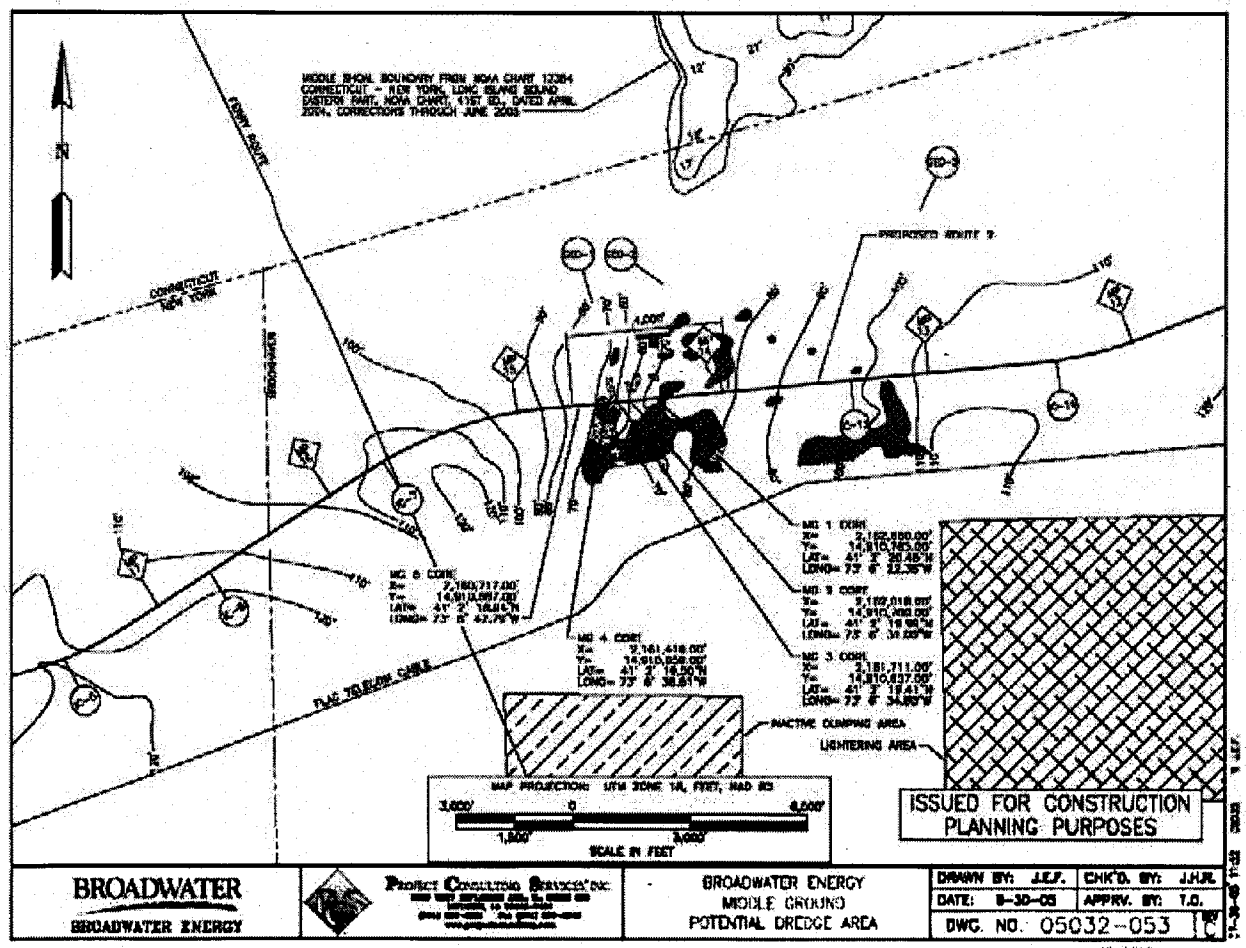
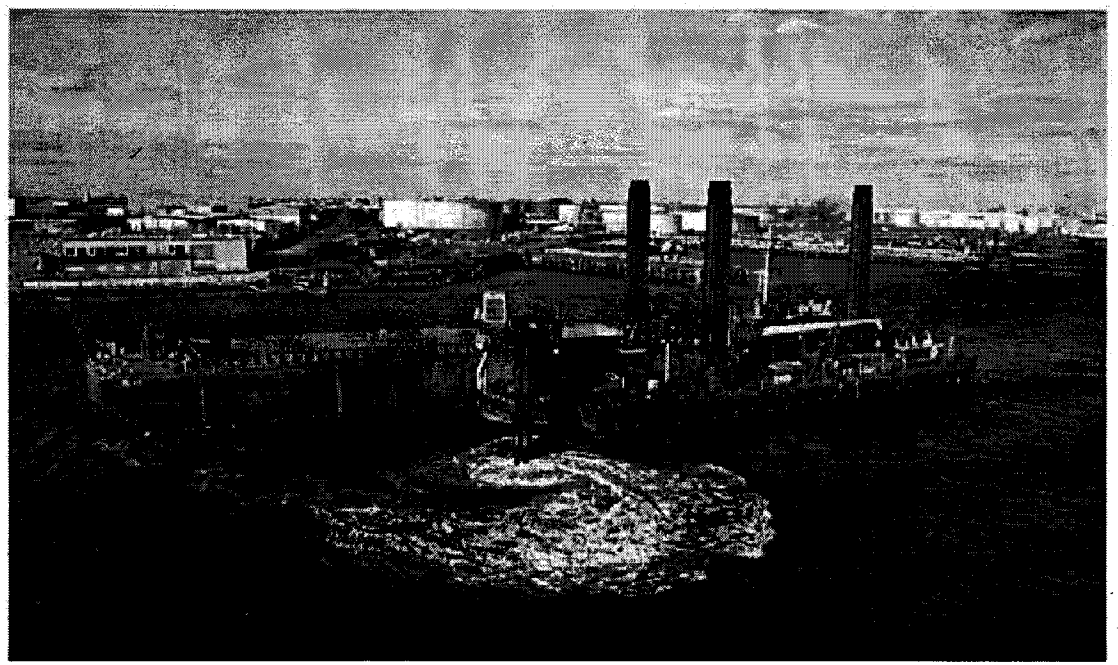
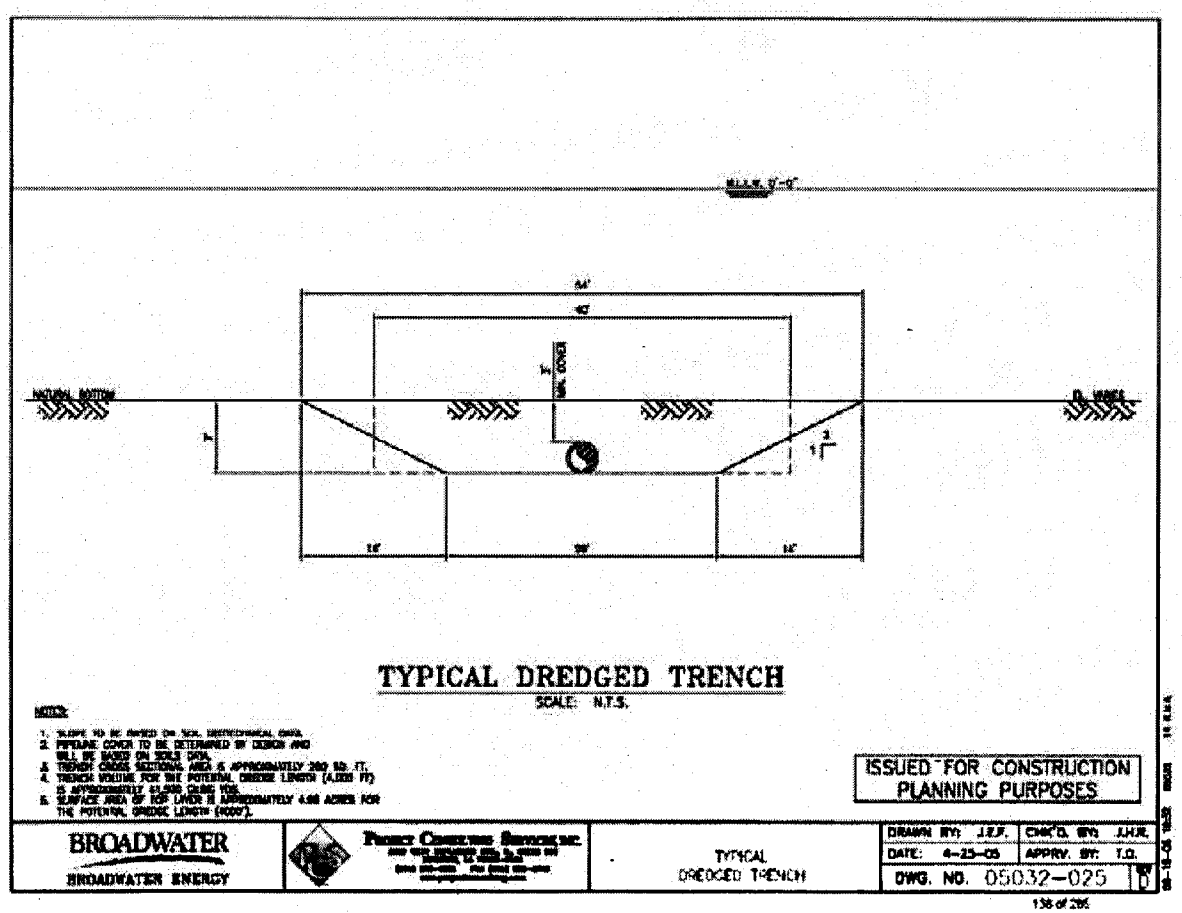


Figure C3-3 Representative Backhoe Dredge



Source: Great Lake Dredge and Dock Web site (www.gldd.com)

Figure C3-4 Typical Dredged Trench



C3.4 Environmental Impacts

Dredging of Stratford Shoal would result in greater turbidity and sedimentation than would be expected from use of the preferred subsea plow. A turbidity plume would be expected to develop during dredging, with incidental release of the sediment occurring as the excavator or clamshell dredge brings the material up to the hopper barge for subsequent disposal. While the greatest turbidity would occur at the bottom during excavation of the sediment, some turbidity would be exhibited on the surface due to the proposed disposal method. Based on the anticipated progress of the dredging activities (3,000 to 5,000 cubic yards per day) the duration of actual dredging would be approximately 13 days, assuming minimum progress. Broadwater's anticipated schedule of 20 days includes a 25% contingency for weather, or other, delays. Since Stratford Shoal is primarily comprised of sand, gravel, and cobbles, the particles in the plume would settle out rapidly, resulting in only minimal transport of sediment. Any significant deposition of the sediment is expected to be restricted to the central pipeline corridor. The lack of contamination identified during the laboratory analysis of sediment samples collected during the spring 2005 field survey minimizes potential impacts associated with the distribution of contamination in conjunction with dredging activities.

Short-term impacts on the existing biological communities on Stratford Shoal would be expected. More mobile organisms would be expected to avoid the dredging activities, while some limited mortality would be expected for less mobile organisms located in immediate proximity to the trench line. Turbidity-related impacts are expected to be minimal, and the turbidity would quickly dissipate following cessation of dredging activities, as the suspended materials would be quickly assimilated through the natural tidal fluctuations experienced daily in Long Island Sound. While the Stratford Shoal area is significantly shallower than the remainder of the proposed pipeline route, no significant or unique communities were identified within the Project area, nor is the area used to a greater extent by the commercial fishing industry. While the on-water boating survey (*see* Appendix B to Resource Report 8 – Land Use, Recreation, and Aesthetics) indicates a higher usage of the Stratford Shoal for recreational fishing, proposed construction activities would occur in the late fall or winter, outside the period of highest use of the Sound.

Due to the short-term nature of the proposed dredging activities, coupled with the sediment composition of Stratford Shoal, the impacts on water quality and existing ecological communities are not expected to be significant if dredging activities at Stratford Shoal are required.